

Supplementary Table S1 – Unique proteins identified in the DMSO group by ESI-LC-MS/MS

Protein Name	ID (Uniprot)	Organism Reference	Cellular Compartment
<u>Transport</u>			
Succinate dehydrogenase [ubiquinone] cytochrome b subunit, mitochondrial	P33421	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Anion/proton exchange transporter GEF1	P37020	<i>Saccharomyces cerevisiae</i>	Golgi apparatus membrane
Sodium transport ATPase 1	P13587	<i>Saccharomyces cerevisiae</i>	Cell membrane
Vacuolar protein sorting-associated protein 16	Q96QK1	<i>Saccharomyces cerevisiae</i>	Vacuole
V-type proton ATPase catalytic subunit A	P32563	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
Protein CASP	P34237	<i>Saccharomyces cerevisiae</i>	Golgi apparatus membrane
Exportin-1	P30822	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Na(+)/H(+) antiporter	B3LT99	<i>Saccharomyces cerevisiae</i>	Membrane
ATP-dependent permease AUS1	Q08409	<i>Saccharomyces cerevisiae</i>	Membrane
Histidine permease	P06775	<i>Saccharomyces cerevisiae</i>	Membrane
ATPase GET3	Q12154	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein SLY1	P22213	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Ferric reductase transmembrane component 5	Q12473	<i>Saccharomyces cerevisiae</i>	Cytoplasm

Vacuolar membrane-associated protein IML1	P47170	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Magnesium transporter	W9KFF0	<i>Fusarium oxysporum</i>	Mitochondrion inner membrane
RanBD1 domain-containing protein	A0A0J9UT92	<i>Fusarium oxysporum</i>	Nucleus
Bifunctional cytochrome P450/ NADPH--P450 reductase	Q9Y8G7	<i>Fusarium oxysporum</i>	Cytoplasm
GPI inositol-deacylase	Q5AYC8	<i>Emericella nidulans</i>	Endoplasmic reticulum membrane
Serine/threonine-protein kinase KIN82	P25341	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Biogenesis of lysosome-related organelles complex 1 subunit	Q75AC2	<i>Ashbya gossypii</i>	Cytoplasmic vesicle
Mitochondrial inner membrane magnesium transporter	Q4I298	<i>Gibberella zeae</i>	Mitochondrion inner membrane
Nuclear distribution protein nudE homolog 1	Q4P0N6	<i>Ustilago maydis</i>	Cytoplasm
Pheromone-regulated membrane protein 9	P39551	<i>Saccharomyces cerevisiae</i>	Membrane
Nucleoporin NUP56	G0S8I1	<i>Chaetomium thermophilum</i>	Nuclear pore complex
Polyamine transporter 2	P53283	<i>Saccharomyces cerevisiae</i>	Membrane
Nuclear protein localization protein 4	Q6BRJ9	<i>Debaryomyces hansenii</i>	Cytoplasm
Vacuolar protein sorting/targeting protein 10	Q5AS50	<i>Emericella nidulans</i>	Golgi apparatus
Mechanosensitive ion channel protein Msy1	O74839	<i>Schizosaccharomyces pombe</i>	Endoplasmic reticulum membrane

COPII coat assembly protein SEC16	Q6CEV2	<i>Yarrowia lipolytica</i>	Endoplasmic reticulum membrane
Mitochondrial glycine transporter	A3M019	<i>Scheffersomyces stipites</i>	Mitochondrion inner membrane
GTP-binding protein gtr1	O74824	<i>Schizosaccharomyces pombe</i>	Vacuole membrane
V-type proton ATPase subunit a	Q01290	<i>Neurospora crassa</i>	Vacuole membrane
Phosphate metabolism protein 7	Q12252	<i>Saccharomyces cerevisiae</i>	Membrane

Cell Function and Structure

Nuclear migration protein NUM1	Q00402	<i>Saccharomyces cerevisiae</i>	Bud tip
Peroxisomal ATPase PEX6	P33760	<i>Saccharomyces cerevisiae</i>	Peroxisome membrane
Killer toxin-resistance protein 5	P22023	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum
Condensin complex subunit 3	Q06680	<i>Saccharomyces cerevisiae</i>	Nucleus
Altered inheritance of mitochondria protein 20	P40451	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
GTPase-interacting component 2	P38785	<i>Saccharomyces cerevisiae</i>	Bud neck
Non-SCF-type F-box protein ROY1	Q04847	<i>Saccharomyces cerevisiae</i>	Cytoplasm
MICOS complex subunit MIC19	P43594	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Nucleoporin ASM4	Q05166	<i>Saccharomyces cerevisiae</i>	Nucleus
HMG2-induced ER-remodeling protein 1	Q12276	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Morphogenesis-related protein MSB1	P21339	<i>Saccharomyces cerevisiae</i>	Cellular bud neck

1,3-beta-glucan synthase component FKS1	P38631	<i>Saccharomyces cerevisiae</i>	Mitochondrion
Nuclear fusion protein BIK1	P11709	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Cell division control protein 48	P25694	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum
Midasin	A0A2H3T3C5	<i>Fusarium oxysporum</i>	Nucleus
Dynein heavy chain, cytoplasmic	A0A0D2XQR5	<i>Fusarium oxysporum</i>	Cytoplasm
Dynamin-type G domain-containing protein	A0A2H3STJ2	<i>Fusarium oxysporum</i>	Nucleus/Cytoplasm
Spindle pole body component	A0A0D2XX36	<i>Fusarium oxysporum</i>	Cytoplasm
Protein sts5	O74454	<i>Saccharomyces pombe</i>	Cytoplasm
Kinesin-like protein bimC	P17120	<i>Emericella nidulans</i>	Cytoplasm
Myosin-1	A7TDZ8	<i>Vanderwaltozyma polyspora</i>	Cytoplasm
Actin cytoskeleton-regulatory complex protein E	L7IIY8	<i>Magnaporthe oryzae</i>	Membrane
Vacuolar protein sorting-associated protein 3	P23643	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Chitin deacetylase 3	P82476	<i>Cryptococcus neoformans</i>	Membrane
Actin-regulating kinase PRK1	Q5A961	<i>Candida albicans</i>	Cytoplasm
Karyogamy meiotic segregation protein 1	P87245	<i>Schizosaccharomyces pombe</i>	Cytoplasm
Target of rapamycin complex	O74184	<i>Schizosaccharomyces pombe</i>	Cytoplasm

subunit wat1			
ATP-dependent DNA helicase CHL1	Q750G3	<i>Ashbya gossypii</i>	Nucleus
Separin	P18296	<i>Schizosaccharomyces pombe</i>	Nucleus
<u>Energetic metabolism</u>			
ATP synthase subunit d, mitochondrial	P30902	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Glyceraldehyde-3-phosphate dehydrogenase 2	P00358	<i>Saccharomyces cerevisiae</i>	Cytoplasm
6-phosphogluconate dehydrogenase, decarboxylating 1	P38720	<i>Saccharomyces cerevisiae</i>	Cytoplasm
FAD-linked oxidoreductase chry5	I1S3L1	<i>Gibberella zeae</i>	Mitochondrion
D-2-hydroxyglutarate—pyruvate transhydrogenase DLD3	P39976	<i>Saccharomyces cerevisiae</i>	Cytoplasm
NADH-ubiquinone oxidoreductase 49 kDa subunit, mitochondrial	P22142	<i>Neurospora crassa</i>	Mitochondrion inner membrane
Cytochrome c oxidase assembly protein COX16, mitochondrial	Q4I8P5	<i>Gibberella zeae</i>	Mitochondrion inner membrane
<u>Protein Folding and metabolism</u>			
26S proteasome regulatory subunit RPN1	P38764	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Elongation factor 2	P32324	<i>Saccharomyces cerevisiae</i>	Cytoplasm
26S proteasome regulatory subunit RPN5	Q12250	<i>Saccharomyces cerevisiae</i>	Proteasome

Tyrosine-protein phosphatase 3	P40048	<i>Saccharomyces cerevisiae</i>	Cytoplasm
U3 small nucleolar RNA-associated protein MPP10	P47083	<i>Saccharomyces cerevisiae</i>	Nucleus
ERAD-associated E3 ubiquitin-protein ligase component HRD3	P47083	<i>Saccharomyces cerevisiae</i>	Endoplasmatic reticulum
Chromosome instability protein 1	P40987	<i>Saccharomyces cerevisiae</i>	Endoplasmatic reticulum
Kexin	P13134	<i>Saccharomyces cerevisiae</i>	Golgi apparatus
Peptide-N(4)-(N-acetyl-beta-glucosaminy) asparagine amidase	Q02890	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Mitochondrial chaperone BCS1	P32839	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Serine/threonine-protein kinase AKL1	P38080	<i>Saccharomyces cerevisiae</i>	Cellular bud neck
ER membrane protein complex subunit 6	P25574	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Protein CSF1	Q12150	<i>Saccharomyces cerevisiae</i>	Membrane
Assembly chaperone of RPL4	Q03771	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein TMA108	P40462	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein ASI1	P53895	<i>Saccharomyces cerevisiae</i>	Nucleus inner membrane
F-box protein YLR352W	Q06479	<i>Saccharomyces cerevisiae</i>	SCF ubiquitin ligase complex
Peptide hydrolase	X0CEB5	<i>Fusarium oxysporum</i>	Mitochondrion
AAA domain-containing protein	A0A0D2Y4N3	<i>Fusarium oxysporum</i>	Nucleus

TYR_PHOSPHATASE_2 domain-containing protein	A0A6M7ZMH6	<i>Fusarium oxysporum</i>	Cytoplasm
Peptidase_M14 domain- containing protein	W9KWL0	<i>Fusarium oxysporum</i>	Extracellular region
Protein kinase domain- containing protein	A0A0D2XQE2	<i>Fusarium oxysporum</i>	Nucleus
UBA_e1_C domain- containing protein	F9FV89	<i>Fusarium oxysporum</i>	Cytoplasm
Clustered mitochondria protein homolog	A0A2H3TIH9	<i>Fusarium oxysporum</i>	Cytoplasm
GPI ethanolamine phosphate transferase 2	A0A6M7ZB90	<i>Fusarium oxysporum</i>	Endoplasmic reticulum membrane
5-aminolevulinate synthase	A0A0D2XE20	<i>Fusarium oxysporum</i>	Mitochondrion
Eukaryotic translation initiation factor 3 subunit M	Q4P0P0	<i>Ustilago maydis</i>	Cytoplasm
Protein rot1	A6S3W1	<i>Botryotinia fuckeliana</i>	Endoplasmic reticulum membrane
Protein SUE1, mitochondrial	Q06524	<i>Saccharomyces cerevisiae</i>	Mitochondrion
Neutral protease 2 homolog MGG_10927	E3QWD3	<i>Colletotrichum graminicola</i>	Secreted
Uba3-binding protein but2	P87167	<i>Schizosaccharomyces pombe</i>	Nucleus
Ubiquinone biosynthesis protein coq4, mitochondrial	B6QTE1	<i>Talaromyces marneffe</i>	Mitochondrion inner membrane

Eukaryotic translation initiation factor 3 subunit K	Q1E6D3	<i>Coccidioides immitis</i>	Cytoplasm
7-dimethylallyltryptophan synthase	Q4WYG3	<i>Neosartorya fumigata</i>	Cytoplasm
N-(5-amino-5-carboxypentanoyl)-L-cysteinyl-D-valine synthase	P27742	<i>Emmericella nidulans</i>	Cytoplasm
Methionine aminopeptidase 2-2	B6QD96	<i>Talaromyces marneffei</i>	Cytoplasm
Carboxypeptidase Y homolog A	C5P212	<i>Coccidioides posadasii</i>	Vacuole

DNA and RNA binding

tRNA (guanosine(18)-2'-O)-methyltransferase	P38238	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Transposon Ty3-G Gag-Pol polyprotein	Q12173	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Transcription elongation factor SPT5	P27692	<i>Saccharomyces cerevisiae</i>	Nucleus
54S ribosomal protein L49, mitochondrial	P40858	<i>Saccharomyces cerevisiae</i>	Mitochondrion
Nuclear localization sequence-binding protein	P27476	<i>Saccharomyces cerevisiae</i>	Nucleus
Mediator of RNA polymerase II transcription subunit 15	P32569	<i>Saccharomyces cerevisiae</i>	Nucleus
RNA cytidine acetyltransferase	P53914	<i>Saccharomyces cerevisiae</i>	Nucleus
Y' element ATP-dependent helicase protein 1 copy 1	O13559	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Pre-mRNA-splicing factor ATP-dependent RNA helicase-like protein	P20095	<i>Saccharomyces cerevisiae</i>	Nucleus
Chromosome transmission fidelity	P49956	<i>Saccharomyces cerevisiae</i>	Nucleus

protein 18			
25S rRNA (adenine(645)-N(1))-Methyltransferase	P38961	<i>Saccharomyces cerevisiae</i>	Nucleus
DNA replication ATP-dependent helicase/nuclease DNA2	P38859	<i>Saccharomyces cerevisiae</i>	Nucleus
Ribonuclease P protein subunit RPR2	P40571	<i>Saccharomyces cerevisiae</i>	Nucleus
DNA-directed RNA polymerase subunit	A0A8J5TW36	<i>Saccharomyces cerevisiae</i>	Nucleus
Zn(2)-C6 fungal-type domain-containing protein	X0CN47	<i>Fusarium oxysporum</i>	Nucleus
Fungal_trans domain-containing protein	W9JP90	<i>Fusarium oxysporum</i>	Nucleus
40S ribosomal protein S1	W9J4B8	<i>Fusarium oxysporum</i>	Cytoplasm
RNA helicase	A0A420QQN4	<i>Fusarium oxysporum</i>	Ribonucleoprotein complex
54S ribosomal protein L31, mitochondrial	A0A6M7ZGN8	<i>Fusarium oxysporum</i>	Mitochondrion
Small nuclear ribonucleoprotein Sm D2	W9J1T5	<i>Fusarium oxysporum</i>	Nucleus
U3 small nucleolar RNA-associated protein 10	W9KN02	<i>Fusarium oxysporum</i>	Nucleus
DNA polymerase gamma	P15801	<i>Saccharomyces cerevisiae</i>	Mitochondrion
54S ribosomal protein YmL6, Mitochondrial	P51998	<i>Saccharomyces cerevisiae</i>	Mitochondrion

GTP:AMP phosphotransferase, Mitochondrial	P26364	<i>Saccharomyces cerevisiae</i>	Mitochondrion matrix
ATPase synthesis protein 25, mitochondrial	A1DIN7	<i>Neosartorya fischeri</i>	Mitochondrion inner membrane
RNA exonuclease 3	Q4WYA1	<i>Neosartorya fumigata</i>	Nucleus
Cytoplasmic tRNA 2- thiolation protein 1	Q5AML2	<i>Candida albicans</i>	Cytoplasm
DNA (cytosine-5-)- methyltransferase DMT5	G2WR64	<i>Verticillium dahliae</i>	Nucleus
Transcription elongation factor SPT5	P0CR71	<i>Cryptococcus neoformans</i>	Nucleus
ATP-dependent RNA helicase DBP7	P0CQ95	<i>Cryptococcus neoformans</i>	Nucleus
Protein pyrABCN	Q08548	<i>Emericella nidulans</i>	Cytoplasm
ATPase synthesis protein 25, mitochondrial	Q09726	<i>Schizosaccharomyces pombe</i>	Mitochondrion inner membrane
Crossover junction endonuclease MUS81	Q04149	<i>Saccharomyces cerevisiae</i>	Nucleus
Nonsense-mediated mRNA decay protein 2	P38798	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Endoribonuclease YSH1	Q4PEJ3	<i>Ustilago maydis</i>	Nucleus
mRNA-capping enzyme subunit alpha	Q01159	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein BFR2	Q6FSD4	<i>Candida glabrata</i>	Nucleus

Lipid Metabolism

Lysophospholipid acyltransferase	Q08548	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Oxysterol-binding protein homolog 3	P38713	<i>Saccharomyces cerevisiae</i>	Cytoplasm
1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase 1	P32383	<i>Fusarium oxysporum</i>	Chromosome, centromeric region
Inositol-3-phosphate synthase	P11986	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Phosphatidyl-N-methylethanolamine N-methyltransferase	P05375	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Sphingosine-1-phosphate lyase	Q05567	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Cardiolipin synthase (CMP-forming)	Q07560	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Carrier domain-containing protein	A0A420REA3	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum
NADPH--cytochrome P450 reductase	A0A3L6P0D2	<i>Fusarium oxysporum</i>	Endoplasmic reticulum
GP-PDE domain-containing protein	A0A8H4ZPR7	<i>Fusarium oxysporum</i>	Nucleus
Phosphatidylethanolamine N-methyltransferase	C5GN10	<i>Ajellomyces dermatitidis</i>	Endoplasmic reticulum membrane
O-acyltransferase ausQ	A0A1U8QLK0	<i>Emericella nidulans</i>	Nucleus
Lipoyl synthase, mitochondrial	A3GGJ5	<i>Scheffersomyces stipitis</i>	Mitochondrion
Lipase 5	Q9P8W0	<i>Candida albicans</i>	Secreted
Lovastatin diketide	Q9Y7D5	<i>Aspergillus terreus</i>	Unknown

synthase lovF

Increased rDNA silencing Protein 4	Q6FJW0	<i>Candida glabrata</i>	Nucleus
3-hydroxy-3-methylglutaryl- coenzyme A reductase	B2KX91	<i>Ganoderma lucidum</i>	Nucleus
Acyl-protein thioesterase 1	Q12354	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Hydroxymethylglutaryl- CoA synthase	K7PL94	<i>Ganoderma lucidum</i>	Cytoplasm
Lipoyl synthase, mitochondrial	P0CH68	<i>Candida albicans</i>	Mitochondrion
FAD-linked oxidoreductase dpmaF	P9WEY2	<i>Metarhizium anisopliae</i>	Cytoplasm
Dihydroxyacetone kinase	O74192	<i>Komagataella pastoris</i>	Cytoplasm
Acetyl-CoA carboxylase dmxL1	A0A4P8DJE6	<i>Cryptosporiopsis sp.</i>	Nucleus
Acetyl-coenzyme A synthetase	P16929	<i>Neurospora crassa</i>	Cytoplasm
Acyl-coenzyme A oxidase	Q756A9	<i>Ashbya gossypii</i>	Peroxisome

Carbohydrate metabolism

Mannitol dehydrogenase 2	P0CX09	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Alpha-L-rhamnosidase	A0A2H3TSB5	<i>Fusarium oxysporum</i>	Cytoplasm
GH16 domain-containing protein	A0A8H5A268	<i>Fusarium oxysporum</i>	Mitochondrion
alpha-1,2-Mannosidase	A0A6M7YP62	<i>Fusarium oxysporum</i>	Membrane

Glycerol-3-phosphate dehydrogenase [NAD(+)]	W9IWZ5	<i>Fusarium oxysporum</i>	glycerol-3-phosphate dehydrogenase complex
Glyco_transf_28 domain-containing protein	A0A8H6LSD4	<i>Fusarium oxysporum</i>	Cytoplasm
UDP-glucose 4-epimerase	W9JR32	<i>Fusarium oxysporum</i>	Cytoplasm
Alpha-L-arabinofuranosidase	B6F261	<i>Fusarium oxysporum</i>	Secreted
Cellulase domain-containing protein	W9I5E6	<i>Fusarium oxysporum</i>	Membrane
Glycerol-3-phosphate dehydrogenase [NAD(+)] 2, mitochondrial	P41911	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Endochitinase 3 (Fragment)	Q6QDR4	<i>Metarhizium anisopliae</i>	Secreted
Lactam utilization protein lamB	P38096	<i>Emericella nidulans</i>	Cytoplasm

Regulation Factor or Signaling

Serine/threonine-protein kinase PTK2/STK2	P47116	<i>Saccharomyces cerevisiae</i>	Nucleus
Regulator of Ty1 transposition protein 103	Q05543	<i>Saccharomyces cerevisiae</i>	Nucleus
Radiation-sensitive protein 28	Q12021	<i>Saccharomyces cerevisiae</i>	Nucleus
GATA-type domain-containing protein	W9KH05	<i>Fusarium oxysporum</i>	Nucleus
Ino eighty subunit 2	P40154	<i>Saccharomyces cerevisiae</i>	Nucleus
Clustered mitochondria protein 1	Q03690	<i>Saccharomyces cerevisiae</i>	Cytoplasm
DNA cross-link repair protein PSO2/SNM1	P30620	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein SST2	P11972	<i>Saccharomyces cerevisiae</i>	Membrane

Aminodeoxychorismate synthase	P37254	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Transcription initiation factor TFIID subunit 1	P46677	<i>Saccharomyces cerevisiae</i>	Nucleus
NuA3 HAT complex component NTO1	Q12311	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein phosphatase PP2A regulatory subunit A	P31383	<i>Saccharomyces cerevisiae</i>	Cytoplasm/ Nucleus
Tyrosyl-DNA phosphodiesterase 1	P38319	<i>Saccharomyces cerevisiae</i>	Cytoplasm/ Nucleus
Silencing boundary-establishment protein FUB1	P25659	<i>Saccharomyces cerevisiae</i>	Nucleus
E3 ubiquitin-protein ligase complex SLX5-SLX8 subunit SLX5	P32828	<i>Saccharomyces cerevisiae</i>	Nucleus
Respiration factor 2	P46974	<i>Saccharomyces cerevisiae</i>	Nucleus
APC/C-CDH1 modulator 1	Q08981	<i>Saccharomyces cerevisiae</i>	Nucleus
Ribosome-interacting GTPase 1	P53295	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Casein kinase II subunit beta'	P43639	<i>Saccharomyces cerevisiae</i>	Cytoplasm/Nucleus
Type 1 phosphatases regulator YPI1	P43587	<i>Saccharomyces cerevisiae</i>	Nucleus
DNA repair protein XRS2	P33301	<i>Saccharomyces cerevisiae</i>	Nucleus
Regulatory protein SWI4	P25302	<i>Saccharomyces cerevisiae</i>	Nucleus

SWIRM domain-containing protein FUN19	P28003	<i>Saccharomyces cerevisiae</i>	Nucleus
Cytosolic Fe-S cluster assembly factor CFD1	P40558	<i>Saccharomyces cerevisiae</i>	Nucleus
F-box protein COS111	P38308	<i>Saccharomyces cerevisiae</i>	Mitochondrion
HDA1 complex subunit 2	Q06629	<i>Saccharomyces cerevisiae</i>	Nucleus
Serine/threonine-protein kinase Tel1	F9G3R4	<i>Saccharomyces cerevisiae</i>	Chromosome
1-phosphatidylinositol 4-kinase	W9LB23	<i>Fusarium oxysporum</i>	Nucleus/Cytoplasm
RFX-type winged-helix domain-containing protein	W9KMD6	<i>Fusarium oxysporum</i>	Nucleus
Histone deacetylase	A0A0D2YC83	<i>Fusarium oxysporum</i>	Nucleus
INCENP_ARK-bind domain-containing protein	W9KH71	<i>Fusarium oxysporum</i>	Nucleus
Phosphatidylinositol 3-kinase VPS34	A0A0D2XHC6	<i>Fusarium oxysporum</i>	Nucleus
Polyadenylate-binding protein	W9I1Q9	<i>Fusarium oxysporum</i>	Cytoplasm
BZIP domain-containing protein	A0A6M7Z7J4	<i>Fusarium oxysporum</i>	Nucleus
26S proteasome regulatory subunit RPN1	W9KBT4	<i>Fusarium oxysporum</i>	Proteosoma
Mediator of RNA polymerase II transcription subunit 5	A0A0D2XC79	<i>Fusarium oxysporum</i>	Nucleus

Histone transcription regulator 3 homolog	Q4IFH8	<i>Gibberella zeae</i>	Nucleus
Mediator of RNA polymerase II transcription subunit 7	Q5AEN6	<i>Candida albicans</i>	Nucleus
Guanine nucleotide-binding protein subunit	O74227	<i>Cochliobolus heterostrophus</i>	heterotrimeric G-protein complex
Multiprotein-bridging factor 1	Q52BY4	<i>Magnaporthe oryzae</i>	Nucleus
CCR4-Not complex 3'-5'- exoribonuclease subunit Ccr4	Q9C2R2	<i>Neurospora crassa</i>	Nucleus
Transcriptional regulatory protein PHO23	P50947	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein kinase C-like	P87253	<i>Neurospora crassa</i>	Cell septum
Signal recognition particle receptor subunit beta	P36057	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Cutinase transcription factor 1 alpha	P52958	<i>Fusarium vanettenii</i>	Nucleus
TATA-binding protein-associated factor mot1	P32333	<i>Saccharomyces cerevisiae</i>	Nucleus
EKC/KEOPS complex subunit BUD32	B7XIB8	<i>Enterocytozoon bieneusi</i>	Chromosome
GPI ethanolamine phosphate transferase 1	Q6CW36	<i>Kluyveromyces lactis</i>	Endoplasmic reticulum membrane
<u>Transcription regulation</u>			
Transcription factor CSR2	Q12734	<i>Saccharomyces cerevisiae</i>	Nucleus

MFS domain-containing protein	W9KH71	<i>Fusarium oxysporum</i>	Cytoplasm
Mediator of RNA polymerase II transcription subunit 5	Q4PAB8	<i>Ustilago maydis</i>	Nucleus

Cell division

Anaphase-promoting complex subunit CDC16	P09798	<i>Saccharomyces cerevisiae</i>	Nucleus
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Amino acid metabolism

Glycine dehydrogenase (decarboxylating), mitochondrial	P26969	<i>Saccharomyces cerevisiae</i>	Mitochondrion
Pyruvate decarboxylase isozyme 3	P11986	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Cystathionine beta-synthase	P32582	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Acetolactate synthase small subunit, mitochondrial	P25605	<i>Saccharomyces cerevisiae</i>	Mitochondrion
Pyruvate decarboxylase isozyme 2	P16467	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Alanine--tRNA ligase	W9L4A1	<i>Fusarium oxysporum</i>	Mitochondrion
Imidazoleglycerol-phosphate dehydratase	W9J9C7	<i>Fusarium oxysporum</i>	Mitochondrion
D-3-phosphoglycerate dehydrogenase	W9KMP9	<i>Fusarium oxysporum</i>	Cytoplasm
C-1-tetrahydrofolate synthase, mitochondrial	O43007	<i>Saccharomyces pombe</i>	Mitochondrion

Arginine biosynthesis bifunctional protein ArgJ, mitochondrial	Q6C627	<i>Yarrowia lipolytica</i>	Mitochondrion
Methylthioribulose-1-phosphate dehydratase	B6QQ13	<i>Talaromyces marneffei</i>	Cytoplasm
Pentafunctional AROM polypeptide	B2B223	<i>Podospira anserina</i>	Cytoplasm
Copper transport protein	P25355	<i>Saccharomyces cerevisiae</i>	Cytoplasm
3-isopropylmalate dehydratase	Q74ZM9	<i>Ashbya gossypii</i>	Cytoplasm
Histidine biosynthesis trifunctional protein	O74712	<i>Candida albicans</i>	Cytoplasm
Arginine biosynthesis bifunctional protein ArgJ, mitochondrial	A0A5N6H9B7	<i>Aspergillus flavus</i>	Cytoplasm

Stress and Defense Response

mitochondrial hydrolase	P53889	<i>Saccharomyces cerevisiae</i>	Mitochondrion
oxidoreductase C24B10.20	Q9P7I6	<i>Schizosaccharomyces pombe</i>	Cytoplasm
Glutathione peroxidase-like peroxiredoxin gpx1	O59858	<i>Schizosaccharomyces pombe</i>	Cytoplasm

Pathogenicity

Acetyltransferase sirH	Q6Q889	<i>Leptosphaeria maculans</i>	Membrane
Mitogen-activated protein kinase kinase MST11	G4N7X0	<i>Magnaporthe oryzae</i>	Nucleus

Subtilisin-like protease 6	A1XIH0	<i>Trichophyton equinum</i>	Secreted
<u>Other Metabolites</u>			
Thiamine biosynthetic bifunctional enzyme	P41835	<i>Saccharomyces cerevisiae</i>	Cytoplasm
FAD_binding_3 domain-containing protein	A0A6M7Z3Q6	<i>Fusarium oxysporum</i>	Membrane
Amine oxidase	F9FXV0	<i>Fusarium oxysporum</i>	Cytoplasm
Tyrosinase	A0A6M7ZIT1	<i>Fusarium oxysporum</i>	Endoplasmic reticulum /Golgi
Iterative polyketide synthase afoE	Q5BEJ6	<i>Emericella nidulans</i>	Endoplasmic reticulum
Molybdenum cofactor sulfurase	B0Y691	<i>Neosartorya fumigata</i>	Cytoplasm
oxidoreductase C30D10.05c	O14351	<i>Saccharomyces pombe</i>	Cytoplasm
Adenylyltransferase and sulfurtransferase uba4	A4RPM5	<i>Magnaporthe oryzae</i>	Cytoplasm
Hybrid PKS-NRPS synthetase iliA	P0DO30	<i>Neonectria sp.</i>	Endoplasmic reticulum membrane
Halogenase otaD	A2R6G7	<i>Aspergillus niger</i>	Mitochondrion
Dehydrogenase xptC	Q5AUN2	<i>Emericella nidulans</i>	Mitochondrion
Cytochrome P450 monooxygenase atnE	Q5AUZ9	<i>Emericella nidulans</i>	Membrane
<u>Unknown</u>			
NADP-dependent 3-hydroxy	Q05016	<i>Saccharomyces cerevisiae</i>	Cytoplasm

acid dehydrogenase			
UPF0641 membrane protein YHR140W	P38842	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Protein FYV8	P46949	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Protein SGM1	Q06629	<i>Saccharomyces cerevisiae</i>	Nucleus
FAD-binding PCMH-type domain-containing protein	A0A6M7YWV0	<i>Fusarium oxysporum</i>	Nucleus
HpcH_HpaI domain- containing protein	A0A6M7Z6R5	<i>Fusarium oxysporum</i>	Mitochondrion
Transket_pyr domain- containing protein	A0A6M7Z6R5	<i>Fusarium oxysporum</i>	Mitochondrion
NB-ARC domain- containing protein	A0A420MRP4	<i>Fusarium oxysporum</i>	Cytoplasm
COesterase domain- containing protein	X0H0X2	<i>Fusarium oxysporum</i>	Nucleus
RNB domain- containing protein	A0A0D2XD23	<i>Fusarium oxysporum</i>	Nucleus
AB hydrolase-1 domain- containing protein	X0HJI4	<i>Fusarium oxysporum</i>	Cytoplasm
OTU domain-containing protein	W9JXF0	<i>Fusarium oxysporum</i>	Nucleus
C2H2-type domain- containing protein	W9JIH0	<i>Fusarium oxysporum</i>	Nucleus
Amidase	W9K8T3	<i>Fusarium oxysporum</i>	Cytoplasm

HEME_HALOPEROXIDASE domain-containing protein	A0A2H3U0R6	<i>Fusarium oxysporum</i>	Nucleus
Ribonuclease Z	A0A8H4Z2B5	<i>Fusarium oxysporum</i>	Cytoplasm
GMC_OxRdtase_N domain-containing protein	W9I4W9	<i>Fusarium oxysporum</i>	Cytoplasm
AB hydrolase-1 domain-containing protein	A0A6M7ZKL2	<i>Fusarium oxysporum</i>	Nucleus
HET domain-containing protein	X0B8E0	<i>Fusarium oxysporum</i>	Cytoplasm
Hydrolase_4 domain-containing protein	A0A2H3SLL2	<i>Fusarium oxysporum</i>	Cytoplasm
Amidohydro-rel domain-containing protein	A0A2H3SLL2	<i>Fusarium oxysporum</i>	Peroxisomal
Fido domain-containing protein	A0A420RA84	<i>Fusarium oxysporum</i>	Nucleus
Aldedh domain-containing protein	F9F287	<i>Fusarium oxysporum</i>	Cytoplasm
NACHT domain-containing protein	A0A6M7Z9K2	<i>Fusarium oxysporum</i>	Nucleus
NAD(+) diphosphatase	A0A559KVW1	<i>Fusarium oxysporum</i>	Nucleus
P4Hc domain-containing Protein	A0A0D2XZJ7	<i>Fusarium oxysporum</i>	Cytoplasm
Methyltransf_25 domain-containing protein	W9JMD3	<i>Fusarium oxysporum</i>	Mitochondrion

Translation machinery-associated protein 22	A2QHG9	<i>Aspergillus niger</i>	Cytoplasm
Siderophore transporter MYCGRDRAFT_70577	F9X9V3	<i>Zymoseptoria tritici</i>	Membrane
Malformin synthetase mlfA	A0A1L9NGU5	<i>Aspergillus tubingensis</i>	Endoplasmic reticulum membrane

Supplementary Table S2 – Unique proteins identified in the treated group by ESI-LC-MS/MS

Protein Name	ID (Uniprot)	Organism Reference	Cellular Compartment
<u>Transport</u>			
Vacuolar protein-sorting-associated protein 46	P69771	<i>Saccharomyces cerevisiae</i>	Endosome membrane
Autophagy-related protein 9	Q06628	<i>Saccharomyces cerevisiae</i>	Membrane
Mitochondrial import inner membrane translocase subunit TIM23	P32897	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Low affinity vacuolar monovalent cation/H (+) antiporter	P42839	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
GTP-binding protein GTR1	Q00582	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
Protein SNQ2	P32568	<i>Saccharomyces cerevisiae</i>	Membrane
Intracellular protein transport protein	P25386	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum/Golgi apparatus
Vacuolar protein sorting/targeting protein VPS	P54787	<i>Saccharomyces cerevisiae</i>	Golgi apparatus
Hexose transporter HXT9	P40885	<i>Saccharomyces cerevisiae</i>	Membrane
Conserved oligomeric Golgi complex subunit 6	P54787	<i>Saccharomyces cerevisiae</i>	Golgi membrane
Membrane-anchored lipid-binding protein LAM6	Q08001	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
GTP-binding protein YPT32/YPT11	P51996	<i>Saccharomyces cerevisiae</i>	Golgi apparatus membrane

MFS domain-containing protein	A0A5C6SDT0	<i>Fusarium oxysporum</i>	Membrane	
Importin N-terminal domain-containing Protein		A0A0D2XQA6	<i>Fusarium oxysporum</i>	Nucleus
FAD-binding FR-type domain-containing Protein	W9HR83		<i>Fusarium oxysporum</i>	Membrane
GPI ethanolamine phosphate transferase reticulum	A0A420Q1C6		<i>Fusarium oxysporum</i>	Endoplasmic
Bifunctional cytochrome P450/NADPH--P450 reductase cytoplasm	Q9Y8G7		<i>Fusarium oxysporum</i>	Nucleus /
MFS domain-containing protein	A0A5C6SDT0		<i>Fusarium oxysporum</i>	Membrane
Adenylyltransferase AND sulfurtransferase uba4	A0A0D2XXF9		<i>Fusarium oxysporum</i>	Cytosol
MFS domain-containing protein	A0A5C6SDT0		<i>Fusarium oxysporum</i>	Membrane
Cation_ATPase_N domain-containing protein	A0A8H5ALP8		<i>Fusarium oxysporum</i>	Membrane
Proton-translocating NAD(P)(+) transhydrogenase	P73496		<i>Fusarium oxysporum</i>	Membrane
Serine/threonine-protein kinase ATG1	Q52EB3		<i>Magnaporthe oryzae</i>	Cytoplasm
DnaJ-related protein spj1	O94625		<i>Schizosaccharomyces pombe</i>	Endoplasmic reticulum
Mating factor M secretion protein mam1	P78966		<i>Schizosaccharomyces pombe</i>	Membrane
Protein SMY2	P32909		<i>Saccharomyces cerevisiae</i>	Cytoplasm

Low-affinity phosphate transporter PHO91	P27514	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
Peroxisomal membrane protein PAS20	P80667	<i>Saccharomyces cerevisiae</i>	Peroxisome membrane
CRAL-TRIO domain-containing protein C23B6.04c	Q9UU99	<i>Schizosaccharomyces pombe</i>	Cell membrane
Copper transport protein ctr4	O94722	<i>Schizosaccharomyces pombe</i>	Membrane
Plasma membrane ATPase 1	P09627	<i>Schizosaccharomyces pombe</i>	Cell membrane
Presequence translocated-associated motor Mitochondrion inner membrane subunit pam17, mitochondrial	C8VTR5	<i>Emericella nidulans</i>	
Vacuolar protein-sorting protein bro-1	Q7SAN9	<i>Neurospora crassa</i>	Endosome
ATPase GET3 Cytoplasm	Q6CPX3	<i>Kluyveromyces lactis</i>	
Vacuolar protein sorting/targeting protein 10	C5FYX2	<i>Arthroderma otae</i>	Golgi apparatus
Major glycerophosphoinositol permease GIT3	Q5A1L6	<i>Candida albicans</i>	Cell membrane
Plasma membrane ATPase	P24545	<i>Zygosaccharomyces rouxii</i>	Cell membrane

Cell Function and Structure

Mitotic check point protein BFA1	P47113	<i>Saccharomyces cerevisiae</i>	Cytoplasm
ATP-dependent DNA helicase CHL1	P22516	<i>Saccharomyces cerevisiae</i>	Nucleus

Actin-related protein 2	P32381	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Growth regulation protein	P12611	<i>Saccharomyces cerevisiae</i>	Nucleus
Serine/threonine-protein kinase YPK2/YKR2	P18961	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein UIP5	P36137	<i>Saccharomyces cerevisiae</i>	Nucleus membrane
Nucleoporin NUP159	P40477	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein TMA23	Q03525	<i>Saccharomyces cerevisiae</i>	Nucleus
Exocyst complex component SEC8	O74562	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein STU1	P38198	<i>Saccharomyces cerevisiae</i>	Centromere
Protein PAL1	Q05518	<i>Saccharomyces cerevisiae</i>	Membrane
Serine/threonine-protein kinase CLA4	P48562	<i>Saccharomyces cerevisiae</i>	Cytoplasm, cytoskeleton
Sister chromatid cohesion protein 1	P40090	<i>Saccharomyces cerevisiae</i>	Nucleus
Essential for maintenance of the cell wall protein 1	P42842	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Serine/threonine-protein kinase GIN4	Q12263	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Phosphatidylinositol 4,5-bisphosphate 5-phosphatase INP51	P40559	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Monopolar spindle protein 2	P53159	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Chitin synthase	Q873Z8	<i>Fusarium oxysporum</i>	Cytoplasm

Aldedh domain-containing protein	F9F287	<i>Fusarium oxysporum</i>	Cytoplasm
Protein SPA2	P23201	<i>Saccharomyces cerevisiae</i>	Cell tip
ASTRA-associated protein 1	A7ESR0	<i>Sclerotinia sclerotiorum</i>	Nucleus
Pheromone-processing carboxypeptidase kex1	B6K7U7	<i>Schizosaccharomyces japonicus</i>	Golgi apparatus / trans-Golgi network membrane
Autophagy-related protein 2	A2QSC9	<i>Aspergillus niger</i>	Endoplasmic reticulum membrane
Inner kinetochore subunit CTF19	Q02732	<i>Saccharomyces cerevisiae</i>	Nucleus
Autophagy-related protein 9	Q75A48	<i>Saccharomyces cerevisiae</i>	Preautophagosomal structure membrane
Serine/threonine-protein kinase tor2	Q9Y7K2	<i>Schizosaccharomyces pombe</i>	Cytoplasm
Anaphase-promoting complex subunit 2	Q12440	<i>Saccharomyces cerevisiae</i>	Cytoplasm
GPI ethanolamine phosphate transferase 1	Q4ILH3	<i>Gibberella zeae</i>	Endoplasmic reticulum membrane
Aspartic proteinase yapsin-7	Q06325	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Inactive metallocarboxypeptidase ecm14	B8M2K0	<i>Talaromyces stipitatus</i>	Vacuole
MICOS complex subunit mic60	Q7SFD8	<i>Neurospora crassa</i>	Mitochondrion inner membrane
Sporulation-specific protein 22	P40511	<i>Saccharomyces cerevisiae</i>	Cell membrane

Energetic metabolism

Succinate dehydrogenase assembly factor 3, mitochondrial	Q04401	<i>Saccharomyces cerevisiae</i>	Mitochondrion
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Cytochrome c mitochondrial import membrane factor CYC2	P38909	<i>Saccharomyces cerevisiae</i>	Mitochondrion	inner
Alcohol dehydrogenase 4	P10127	<i>Saccharomyces cerevisiae</i>	Mitochondrion	
54S ribosomal protein L17, mitochondrial	P36528	<i>Saccharomyces cerevisiae</i>	Mitochondrion	
NAD-dependent malic enzyme, mitochondrial	P36013	<i>Saccharomyces cerevisiae</i>	Mitochondrion	
Glycogen debrancher	A0A2H3T8G3	<i>Fusarium oxysporum</i>	Cytoplasm	
Kinesin motor domain-containing protein	W9L7Z1	<i>Fusarium oxysporum</i>	Mitochondrion	
Structural maintenance of chromosomes Protein	A0A0D2XQL5	<i>Fusarium oxysporum</i>	Nucleus	
Kinesin-like protein Microtubule	A0A6M7Z0I0	<i>Fusarium oxysporum</i>		
HTH APSES-type domain-containing Nucleus Protein	W9KJX9	<i>Fusarium oxysporum</i>		
Glycerol kinase Cytoplasm	W9JLB5	<i>Fusarium oxysporum</i>		
Isoamyl acetate-hydrolyzing esterase	O74648	<i>Schizosaccharomyces pombe</i>	Cytoplasm	
ATP synthase subunit 5, mitochondrial inner membrane	A0A6A5Q1Y3	<i>Saccharomyces cerevisiae</i>	Mitochondrion	
Phosphoglycerate kinase 2	P29406	<i>Rhizopus niveus</i>	Cytoplasm	
NADH-ubiquinone oxidoreductase chain 4 Mitochondrion membrane	A9RAH8	<i>Debaryomyces hansenii</i>		

Protein Folding and metabolism

E3 ubiquitin-protein ligase substrate receptor	P39940	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Isoleucine--tRNA ligase, cytoplasmic	P09436	<i>Saccharomyces cerevisiae</i>	Cytoplasm
N-terminal acetyltransferase A complex subunit NAT1	P12945	<i>Saccharomyces cerevisiae</i>	Cytoplasm
N-alpha-acetyltransferase 35, NatC auxiliary subunit	Q02197	<i>Saccharomyces cerevisiae</i>	Cytoplasm
5-demethoxyubiquinone hydroxylase, mitochondrial	P41735	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
CUE domain-containing protein CUE4	Q04201	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Low molecular weight phosphotyrosine protein phosphatase	P40347	<i>Saccharomyces cerevisiae</i>	Cytoplasm
H/ACA ribonucleoprotein complex non-core subunit NAF1	P53919	<i>Saccharomyces cerevisiae</i>	Nucleus
Elongation factor 3B	P53978	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Coupling of ubiquitin conjugation to ER degradation protein 1	Q08412	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane

Actin cytoskeleton-regulatory complex protein PAN1	P32521	<i>Saccharomyces cerevisiae</i>	Endosome membrane
Ribosome biogenesis protein UTP30	P36144	<i>Saccharomyces cerevisiae</i>	Nucleus
Dolichyldiphosphatase	P53223	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Proteasome chaperone 1	P53196	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Dipeptidase	A0A2H3T5I7	<i>Fusarium oxysporum</i>	Cytoplasm
Peptidase_S8 domain-containing protein	A0A420NBM7	<i>Fusarium oxysporum</i>	Nucleus
Leukotriene A-4 hydrolase homolog	W9ZSS5	<i>Fusarium oxysporum</i>	Endoplasmic reticulum
Protein kinase domain-containing Protein	A0A0D2XQE2	<i>Fusarium oxysporum</i>	Nucleus
Protein kinase domain-containing protein	A0A0D2XQE2	<i>Fusarium oxysporum</i>	Cytoplasm
Protein kinase domain-containing protein	A0A0D2XQE2	<i>Fusarium oxysporum</i>	Nucleus
54S ribosomal protein yml6, mitochondrial	O74801	<i>Schizosaccharomyces pombe</i>	Mitochondrion
Methionine aminopeptidase 2	E3L3Q8	<i>Puccinia graminis</i>	Cytoplasm
Ubiquinone biosynthesis protein COQ4, mitochondrial	A5DVZ3	<i>Lodderomyces elongisporus</i>	Mitochondrion inner membrane
DUB-associated factor 1	Q99247	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Isoleucine--tRNA ligase, mitochondrial	Q9USL3	<i>Schizosaccharomyces pombe</i>	Mitochondrion matrix
Lon protease homolog 2, peroxisomal	Q9USL3	<i>Neurospora crassa</i>	Peroxisomal matrix

Protein OS-9 homolog	Q756T2	<i>Ashbya gossypii</i>	Endoplasmic reticulum membrane
Eukaryotic translation initiation factor 6	A0A0B0DUG9	<i>Neurospora crassa</i>	Nucleus / nucleolus
Alanine--tRNA ligase	Q5AQL1	<i>Emericella nidulans</i>	Mitochondrion
Osmolarity two-component system protein SSK1	Q07084	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Dol-P-Man:Man(5)GlcNAc(2)-PP-Dol alpha-1,3-mannosyltransferase	0TVF9	<i>Phaeosphaeria nodorum</i>	Endoplasmic reticulum membrane
Eukaryotic translation initiation factor 3 subunit I	P79083	<i>Schizosaccharomyces pombe</i>	Cytoplasm
U3 small nucleolar RNA-associated protein 12	Q12220	<i>Saccharomyces cerevisiae</i>	Nucleus / nucleolus
Zuotin	Q9Y7I8	<i>Schizosaccharomyces pombe</i>	Cytosol

DNA and RNA binding

ATP-dependent RNA helicase ROK1	P45818	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein URA2	P07259	<i>Saccharomyces cerevisiae</i>	Cytoplasm
RNA exonuclease 1	Q12149	<i>Saccharomyces cerevisiae</i>	Nucleus
Pre-rRNA-processing protein IPI1	P38803	<i>Saccharomyces cerevisiae</i>	Nucleus
Protein MPE1	P35728	<i>Saccharomyces cerevisiae</i>	Nucleus

Cytoplasmic 60S subunit biogenesis factor REI1	P38344	<i>Saccharomyces cerevisiae</i>	Cytoplasm
U4/U6 snRNA-associated-splicing factor PRP24	P49960	<i>Saccharomyces cerevisiae</i>	Nucleus
5'-deoxynucleotidase YBR242W	P38331	<i>Saccharomyces cerevisiae</i>	Cytoplasm
tRNA (cytidine(32)-2'-O)-methyltransferase non-catalytic subunit TRM732	P38238	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Mitochondrial group I intron splicing factor CCM1	P48237	<i>Saccharomyces cerevisiae</i>	Mitochondrion
H/ACA ribonucleoprotein complex subunit CBF5	P33322	<i>Saccharomyces cerevisiae</i>	Nucleus
DNA-directed RNA polymerase subunit	A0A0C4DHV9	<i>Fusarium oxysporum</i>	Nucleus
Zn(2)-C6 fungal-type domain-containing Protein	A0A0D2XDM8	<i>Fusarium oxysporum</i>	Nucleus
DNA topoisomerase I	A0A2C8CY01	<i>Fusarium oxysporum</i>	Chromosome
Kynurenine 3-monooxygenase	A0A2H3SUS1	<i>Fusarium oxysporum</i>	Mitochondrion outer membrane
Zn(2)-C6 fungal-type domain-containing protein	A0A0D2XDM8	<i>Fusarium oxysporum</i>	Nucleus
DNA-directed RNA polymerase subunit beta	A0A0C4DHV9	<i>Fusarium oxysporum</i>	Nucleus
DNA topoisomerase 2	A0A6M7YWD6	<i>Fusarium oxysporum</i>	Nucleus

Fungal_trans domain-containing Protein	W9JP90	<i>Fusarium oxysporum</i>	Nucleus
40S ribosomal protein S26	W9I0R7	<i>Fusarium oxysporum</i>	Ribosome
CTP synthase	A0A6M7YU47	<i>Fusarium oxysporum</i>	Mitochondrion /cytoplasm
eIF-2B GDP-GTP exchange factor subunit epsilon	X0LIC3	<i>Fusarium oxysporum</i>	Nucleus
Orotate phosphoribosyltransferase	Q1DNB0	<i>Coccidioides immitis</i>	Mitochondrion
Flap endonuclease 1	A5E121	<i>Lodderomyces elongisporus</i>	Nucleus/nucleolus
mRNA-capping enzyme subunit alpha	Q01159	<i>Schizosaccharomyces pombe</i>	Nucleus
Histone H4	Q6ZXX3	<i>Ustilago maydis</i>	Nucleosome
60S ribosomal protein	O13418	<i>L15 Aspergillus niger</i>	Ribosome
tRNA (uracil-O(2)-)-methyltransferase	Q6BRY1	<i>Debaryomyces hansenii</i>	Cytoplasm
U3 small nucleolar RNA-associated protein 10	A5E212	<i>Lodderomyces elongisporus</i>	Nucleus/nucleolus/membrane
60S ribosomal protein L7	Q6FSN6	<i>Candida glabrata</i>	Cytosolic large ribosomal subunit
Zinc finger CCCH domain-containing protein C337.12	O74823	<i>Schizosaccharomyces pombe</i>	Nucleus
Polyadenylate-binding protein, cytoplasmic and nuclear	A5DM21	<i>Meyerozyma guilliermondii</i>	Nucleus/cytoplasm
ATP-dependent RNA helicase MRH4, mitochondrial	Q755C5	<i>Ashbya gossypii</i>	Mitochondrion
tRNA (adenine(58)-N(1))-methyltransferase non-catalytic subunit TRM6	Q6CF35	<i>Yarrowia lipolytica</i>	Nucleus
Nucleolar protein 58	A2QE38	<i>Aspergillus niger</i>	Nucleus/nucleolus

ATP-dependent RNA helicase ROK1	P45818	<i>Saccharomyces cerevisiae</i>	Nucleolus
Inosine triphosphate pyrophosphatase	D5GCI8	<i>Tuber melanosporum</i>	Cytoplasm
54S ribosomal protein L3, mitochondrial	O43042	<i>Schizosaccharomyces pombe</i>	Mitochondrion
tRNA (adenine(58)-N(1))-methyltransferase non-catalytic subunit trm6	Q4WE58	<i>Neosartorya fumigata</i>	Nucleus
Cytochrome b mRNA maturase bI3	A9RAG7	<i>Debaryomyces hansenii</i>	Mitochondrion inner membrane
Pre-mRNA-processing ATP-dependent RNA helicase PRP5	A5E058	<i>Lodderomyces elongisporus</i>	Nucleus
Dihydroorotate dehydrogenase (quinone), mitochondrial	Q63707	<i>Lachancea kluyveri</i>	Mitochondrion inner membrane
Mitochondrial escape protein 2	P32843	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane
Flap endonuclease 1	Q6BLF4	<i>Debaryomyces hansenii</i>	Nucleus/nucleolus
Orotidine 5'-phosphate decarboxylase	P15188	<i>Ustilago maydis</i>	Cytosol

Lipid Metabolism

Manganese lipxygenase	F9FRH4	<i>Fusarium oxysporum</i>	Nucleus
PlsC domain-containing protein	A0A420SRZ6	<i>Fusarium oxysporum</i>	Cellular anatomical Entity

Carbohydrate metabolism

Phosphoenolpyruvate carboxykinase (ATP)	P10963	<i>Saccharomyces cerevisiae</i>	Cytoplasm
SNF1-activating kinase 1	P38990	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Alpha-glucosidase MAL12	P53341	<i>Saccharomyces cerevisiae</i>	Membrane
Glucosamine-6-phosphate deaminase	W9KB79	<i>Fusarium oxysporum</i>	Cytoplasm
Cas1_AcylT domain-containing Protein	A0A6M7YXG0	<i>Fusarium oxysporum</i>	Membrane
Phosphoglycerate kinase	A0A1D8MJA9	<i>Fusarium oxysporum</i>	Nucleus / cytoplasm
Transcription activator of gluconeogenesis ERT1	C4YLC3	<i>Candida albicans</i>	Nucleus
Beta-mannosidase B	Q5B7W2	<i>Emmericella nidulans</i>	Cytoplasm
NAD(P)H-dependent D-xylose reductase	Q9P430	<i>Scheffersomyces shehatae</i>	Cytoplasm
Exo-alpha-sialidase	Q4WQS0	<i>Neosartorya fumigata</i>	Cytoplasm
Ergosteryl-beta-glucosidase	P40566	<i>Saccharomyces cerevisiae</i>	Cytoplasm/cytosol
Cytosolic neutral trehalase	P52494	<i>Candida albicans</i>	Cytoplasm
FAD-binding monooxygenase prhJ	A0A1E1FFN7	<i>Penicillium brasilianum</i>	Cytoplasm / mitochondrion
Patatin-like phospholipase domain-containing protein MGG_12849	A4R8V2	<i>Magnaporthe oryzae</i>	Membrane

Lysophospholipase	Q2H0D3	<i>NTE1 Chaetomium globosum</i>	Endoplasmic reticulum
Non-reducing polyketide synthase stbA	A0A193PS74	<i>Stachybotrys bisbyi</i>	Nucleus
Triacylglycerol lipase ptl3	Q9Y827	<i>Schizosaccharomyces pombe</i>	Cytoplasm
Hybrid PKS-NRPS synthetase TAS1	G4N137	<i>Magnaporthe oryzae</i>	Mitochondrion
Very-long-chain 3-oxoacyl-CoA reductase	Q75A60	<i>Ashbya gossypii</i>	Endoplasmic reticulum membrane
NADPH--cytochrome P450 reductase	P16603	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Patatin-like phospholipase domain-containing protein CIMG_04897	Q1DXR6	<i>Coccidioides immitis</i>	Membrane
Fatty acid synthase subunit alpha	P43098	<i>Candida albicans</i>	Fatty acid synthase complex

Pathogenicity

Cyclochlorotine synthetase	A0A0U1LQE6	<i>Talaromyces islandicus</i>	Endoplasmic reticulum
Nonribosomal peptide synthetase 1	Q4WT66	<i>Neosartorya fumigata</i>	Cytoplasm
Nonribosomal peptide synthetase vlms	A0A024F910	<i>Lecanicillium</i>	Endoplasmic reticulum
Reducing polyketide synthase AFT16-1	V5Y0F7	<i>Alternaria alternata</i>	Nucleus / Cytoplasm
Acyltransferase BOA11	A6SSW1	<i>Botryotinia fuckeliana</i>	Cytoplasm

Regulation Factor or Signaling

Negative regulator of RAS-cAMP pathway	P34072	<i>Saccharomyces cerevisiae</i>	Nucleus
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Protein SRL3	P36167	<i>Saccharomyces cerevisiae</i>	Cytoplasm	
SWI/SNF global transcription activator complex subunit	P43554	<i>Saccharomyces cerevisiae</i>	Nucleus	
Pheromone a factor receptor	Q00619	<i>Saccharomyces cerevisiae</i>	Membrane	
MEMO1 family protein MHO1	P47085	<i>Saccharomyces cerevisiae</i>	Cytoplasm	
General transcription and DNA repair factor IIH subunit TFB2	Q02939	<i>Saccharomyces cerevisiae</i>	Nucleus	
Regulatory protein SWI6	P09959	<i>Saccharomyces cerevisiae</i>	Nucleus/Cytoplasm	
Transcription regulatory protein SNF2	P22082	<i>Saccharomyces cerevisiae</i>	Nucleus	
Rho-GTPase-activating protein RGD2	P43556	<i>Saccharomyces cerevisiae</i>	Nucleus	
Protein PET122, mitochondrial	P10355	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane	
Transcription factor TFIIIB component B"	P46678	<i>Saccharomyces cerevisiae</i>	Nucleus	
Zinc finger protein MSN2	P33748	<i>Saccharomyces cerevisiae</i>	Cytoplasm/ Nucleus	
DNA repair/transcription protein MET18/MMS19	P40469	<i>Saccharomyces cerevisiae</i>	Nucleus	
Aprataxin-like protein	Q08702	<i>Saccharomyces cerevisiae</i>	Nucleus	
Mitochondrial escape protein 2	P32843	<i>Saccharomyces cerevisiae</i>	Mitochondrion inner membrane	
Actin-related protein 8	W9IT40	<i>Fusarium oxysporum</i>	Nucleus	
Mediator of RNA polymerase II transcription subunit 1		A0A0D2XHG4	<i>Fusarium oxysporum</i>	Nucleus

Zn(2)-C6 fungal-type domain-containing Protein	A0A0D2XDM8	<i>Fusarium oxysporum</i>	Nucleus
ATP-dependent DNA helicase	A0A8H6LMY2	<i>Fusarium oxysporum</i>	Nucleus
Fork-head domain-containing protein	W9JSR5	<i>Fusarium oxysporum</i>	Nucleus
Serine/threonine-protein kinase TEL1	Q6CP76	<i>Kluyveromyces lactis</i>	Chromosome
Vacuolar membrane-associated protein iml1	Q2UMR9	<i>Aspergillus oryzae</i>	Vacuolar membrane
ISWI chromatin-remodeling complex ATPase ISW2	Q5A310	<i>Candida albicans</i>	Nucleus
DNA mismatch repair protein MSH3	Q6CHE5	<i>Yarrowia lipolytica</i>	Nucleus
C2H2 type master regulator of conidiophore development brlA	P10069	<i>Aspergillus oryzae</i>	Nucleus
Methylated-DNA--protein-cysteine methyltransferase	Q6BVY4	<i>Debaryomyces hansenii</i>	Nucleus
Verprolin	P37370	<i>Saccharomyces cerevisiae</i>	Cytoplasm/cytoskeleton
Nicotinate catabolism cluster-specific transcription factor	C8VJW0	<i>Emmericella nidulans</i>	Nucleus
Transcription activator of gluconeogenesis HCBG_00867	C0NCM1	<i>Ajellomyces capsulatus</i>	Nucleus
Negative cofactor 2 complex subunit beta	Q92317	<i>Saccharomyces cerevisiae</i>	Nucleus
Transcriptional regulator of filamentous growth FLO8	Q59QW5	<i>Candida albicans</i>	Nucleus
Transcription factor VHR1	P40522	<i>Saccharomyces cerevisiae</i>	Nucleus

bZip transcription factor GAP1	Q6FRZ8	<i>Candida glabrata</i>	Nucleus
RNA polymerase I-specific transcription initiation factor RRN5	Q02983	<i>Saccharomyces cerevisiae</i>	Nucleus
ATPase synthesis protein 25, mitochondrial inner membrane	Q6C7D6	<i>Yarrowia lipolytica</i>	Mitochondrion
Siderophore biosynthesis regulatory protein URBS1	P40349	<i>Ustilago maydis</i>	Nucleus
Flap endonuclease 1 nucleolus	A4QS18	<i>Magnaporthe oryzae</i>	Nucleus /
RNA-silencing factor ers1	O94717	<i>Schizosaccharomyces pombe</i>	Cytoplasm
Telomere length regulation protein TEN1 region	Q07921	<i>Saccharomyces cerevisiae</i>	Chromosome / telomeric
Histone acetyltransferase type B subunit 2	Q6FXI8	<i>Candida glabrata</i>	Cytoplasm

Amino acid metabolism

High-affinity glutamine permease	P48813	<i>Saccharomyces cerevisiae</i>	Mitochondrion membrane
Vacuolar amino acid transporter 3	P36062	<i>Saccharomyces cerevisiae</i>	Vacuole membrane
D-3-phosphoglycerate dehydrogenase 2	P40510	<i>Saccharomyces cerevisiae</i>	Cytoplasm

Glutathione hydrolase Mitochondrion /cytoplasm	W9JMZ4	<i>Fusarium oxysporum</i>	
PALP domain-containing protein Mitochondrion	A0A5C6TN97	<i>Fusarium oxysporum</i>	
Glutathione synthetase Nucleus	A0A420MCL8	<i>Fusarium oxysporum</i>	
Pentafunctional AROM polypeptide Cytoplasm	A0A2H3TLG9	<i>Fusarium oxysporum</i>	
Kynurenine formamidase	Q04066	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Methylthioribose-1-phosphate isomerase	A7TSA5	<i>Vanderwaltozyma polyspora</i>	Cytoplasm
Thiamine thiazole synthase Cytoplasm	A7EWL8	<i>Sclerotinia sclerotiorum</i>	

Stress and Defense Response

Heat shock protein homolog SSE1	P32589	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Membrane-anchored lipid-binding protein YSP2	Q06681	<i>Saccharomyces cerevisiae</i>	Endoplasmic reticulum membrane
Heat shock protein SSA4	P22202	<i>Saccharomyces cerevisiae</i>	Cytoplasm
6-methylsalicylic acid synthase	P22367	<i>Penicillium patulum</i>	Cytoplasm

Mechanosensitive ion channel membrane protein Msy2	O14050	<i>Schizosaccharomyces pombe</i>	Endoplasmic reticulum
Protein SIP5	Q759M1	<i>Ashbya gossypii</i>	Cytoplasm
Dicer-like protein 2	A1D9Z6	<i>Neosartorya fischeri</i>	Cytoplasm
Stress response protein nst1	Q7S8V3	<i>Neurospora crassa</i>	Cytoplasm
Cytochrome c peroxidase, mitochondrial	Q6BKY9	<i>Debaryomyces hansenii</i>	Mitochondrion

Transcription regulation

Protein hir1	Q0CQ54	<i>Aspergillus terreus</i>	Nucleus
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Other Metabolites

Inactive deaminase YBR284W	P38150	<i>Saccharomyces cerevisiae</i>	Cytoplasm/Membrane
Urea amidolyase	P32528	<i>Saccharomyces cerevisiae</i>	Cytoplasm
2,5-diamino-6-ribosylamino-4(3H) -pyrimidinone 5'-phosphate reductase	P33312	<i>Saccharomyces cerevisiae</i>	Cytoplasm
FAD_binding_3 domain-containing Protein	A0A6M7Z3Q6	<i>Fusarium oxysporum</i>	Mitochondrion
Adenosylmethionine decarboxylase	W9HY08	<i>Fusarium oxysporum</i>	Cytoplasm
Molybdopterine synthase catalytic subunit	A2R3H4	<i>Aspergillus niger</i>	Cytoplasm
Adenylate cyclase	P23466	<i>Lachancea kluyveri</i>	Nucleus

Hydroxamate-type ferrichrome siderophore peptide synthetase	Q9P7T1	<i>Schizosaccharomyces pombe</i>	Cytoplasm
3-ketosteroid 1-dehydrogenase heIE	Q4WR24	<i>Neosartorya fumigata</i>	Mitochondrion
Folic acid synthesis protein FOL1	P53848	<i>Saccharomyces cerevisiae</i>	Mitochondrion membrane
FAD-dependent monooxygenase sdgC	A0A1U8QHS4	<i>Emericella nidulans</i>	Membrane

Unknown

Protein RFS1	P38234	<i>Saccharomyces cerevisiae</i>	Cytoplasm
PX domain-containing protein YPR097W	Q06839	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Protein FMP27, mitochondrial	Q06179	<i>Saccharomyces cerevisiae</i>	Mitochondrion
BZIP domain-containing protein	A0A6M7Z7J4	<i>Fusarium oxysporum</i>	Nucleus
ABC1 domain-containing protein	A0A6M7Z9K2	<i>Fusarium oxysporum</i>	Nucleus
AMP-binding domain-containing protein	W9KNE1	<i>Fusarium oxysporum</i>	Cytoplasm
Mtf2 domain-containing protein	A0A2H3T9L8	<i>Fusarium oxysporum</i>	Mitochondrion
gag_pre-integr domain-containing protein	A0A420PAX1	<i>Fusarium oxysporum</i>	Nucleus
SCP domain-containing protein Nucleus	A0A6M7ZUM5	<i>Fusarium oxysporum</i>	
HTH APSES-type domain-containing protein Nucleus	W9KJX9	<i>Fusarium oxysporum</i>	
Spc7 domain-containing protein Nucleus	W9LBX5	<i>Fusarium oxysporum</i>	

HET domain-containing protein Nucleus/Cytoplasm	X0B8E0	<i>Fusarium oxysporum</i>
Isochorismatase domain-containing protein Cytoplasm	W9K8Q9	<i>Fusarium oxysporum</i>
2EXR domain-containing protein Unknown	A0A6M7ZEK6	<i>Fusarium oxysporum</i>
DJ-1_PfpI domain-containing protein Unknown	A0A6M7YN02	<i>Fusarium oxysporum</i>
Abhydrolase_3 domain-containing protein Cytoplasm	A0A2H3GEN0	<i>Fusarium oxysporum</i>
Cytochrome b5 heme-binding Nucleus domain-containing protein	A0A420STL5	<i>Fusarium oxysporum</i>
AB hydrolase-1 domain-containing protein Cytoplasm	W9JP57	<i>Fusarium oxysporum</i>
Homeobox domain-containing protein Nucleus	A0A6M7YN32	<i>Fusarium oxysporum</i>
SH3 domain-containing protein Integral component of membrane	X0IL15	<i>Fusarium oxysporum</i>
FAD-binding PCMH-type Endoplasmic domain-containing protein	A0A6M7YWV0	<i>Fusarium oxysporum</i>
Deacetylase sirtuin-type Nucleus domain-containing protein	A0A6M7ZUM4	<i>Fusarium oxysporum</i>

NB-ARC domain-containing protein Cytoplasm	W9KX17	<i>Fusarium oxysporum</i>	
5'-deoxynucleotidase Cytoplasm / Mitochondrion	A0A6M7ZG25	<i>Fusarium oxysporum</i>	
DNA helicase Nucleus	W9IMG1	<i>Fusarium oxysporum</i>	
Dimer_Tnp_hAT domain-containing protein Cytoplasm / nucleus	A0A8H6GUX8	<i>Fusarium oxysporum</i>	
J domain-containing protein Membrane	A0A8H5AIT8	<i>Fusarium oxysporum</i>	
Maintenance of telomere capping protein 2	C5E1C0	<i>Zygosaccharomyces rouxii</i>	Unknown
Membrane-bound O-acyltransferase GUP1 membrane	Q7Z888	<i>Millerozyma farinosa</i>	Cell
Baeyer-Villiger monooxygenase nsrF	A0A2I1C3U2	<i>Aspergillus novofumigatus</i>	Cytoplasm
Cytochrome P450 monooxygenase 98	F1SY91	<i>Postia placenta</i>	Membrane
Altered inheritance of mitochondria protein 41, mitochondrial	A5DKQ3	<i>Meyerozyma guilliermondii</i>	Mitochondrion
Protein PAR32	Q12515	<i>Saccharomyces cerevisiae</i>	Cytoplasm
Nonribosomal peptide synthetase 4 reticulum	I1RF49	<i>Gibberella zeae</i>	Endoplasmic
Sorbose reductase homolog SOU2	P87218	<i>Candida albicans</i>	Cytoplasm

pH-response regulator protein palF/RIM8 Unknown	Q52FM1	<i>Magnaporthe oryzae</i>	
T-complex protein 1 subunit eta	Q8SR53	<i>Encephalitozoon cuniculi</i>	Cytoplasm
Monooxygenase AacuP Cytoplasm	A0A1L9WLD7	<i>Aspergillus aculeatus</i>	
FK506-binding protein 4	G0SC91	<i>Chaetomium thermophilum</i>	Nucleus
Topoisomerase I damage affected protein 2	A7TTT7	<i>Vanderwaltozyma polyspora</i>	Cytoplasm
Cytochrome P450 monooxygenase orf6	A0A068ACU3	<i>Eupenicillium brefeldianum</i>	Membrane